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A Meta-analytical Examination of the Transgenerational Transmission of Eating Disorders

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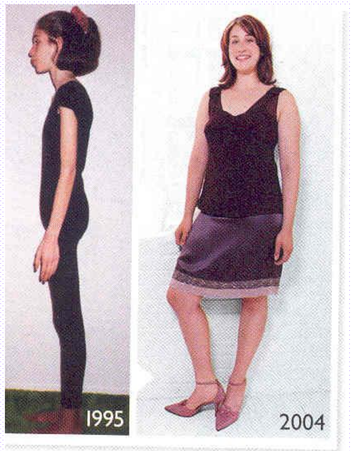

Marie Claire. November 2004, 154.

Abstract

Twenty-four effect sizes were calculated in this meta-analysis which examined the relationship between maternal modeling of body and eating attitudes and its effect on body and eating attitudes of their daughters. It was hypothesized that there would be a significant relationship with heterogeneity of effect sizes. The results showed a small but significant correlation between eating behaviors of mothers and daughters. Heterogeneity in the initial analysis led to sub-analyses. The sub-analyses looked at age, whether the participants were clinically diagnosed or not, and whether the daughter's indicated their perception of their mother's eating behavior. The sub-analyses with significant correlations were those with daughters age 12 and under, the non-clinical studies and those that had the daughter's rate their mother's eating behavior.

Introduction

- Most children observe the eating behavior of their mothers.
- This raises the question to whether a mother's eating patterns influence the eating patterns of her children, particularly her daughter's.
- Girls as young as five have indicated knowledge of dieting practices, as well as concepts and beliefs associated with dieting (Abramovitz & Birch, 2000).
- Of particular interest in this meta-analysis was maternal modeling of eating behavior and whether daughters imitate the eating behavior of their mothers.
- Mothers of daughters with eating disorders have been shown to start dieting at a younger age and therefore diet for a longer period of time (Pike & Rodin, 1991).
- However thus far the research has led to varied results.
- The purpose of this meta-analysis is to examine the relationship between maternal modeling of body and eating attitudes and its effect on female children's and adolescents' body and eating attitudes.
- It was hypothesized that there would be a significant relationship with heterogeneity of effect sizes.

Method

Studies Considered:

- Searches for literature were performed using the Ohiolink Electronic Journal Center and PSYCHINFO.
- Key words used were eating disorders, dieting, socio-cultural influences, parental influences, parental modeling, familial influences, maternal modeling and maternal influences.
- Approximately 35 studies were considered for the meta-analysis.
- The final number of studies included in the analysis was 24.
- The studies analyzed used various tests to measure levels of disordered eating, including the EAT, the dietary restraint scale (DEBQ-R), the weight concerns scale, and the EDI.

Calculation Methods:

- Effect sizes were calculated as *r*-values. An effect size is an index of the relationship between the independent and dependent variables. The *r*-values were converted to Fisher-z scores. An average Fisher-z was calculated and then converted back to *r*.
- Significance was tested using a *z* statistic.

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Results

Main Analysis:

- The overall effect size was $r = 0.116972$, $p<.001$ and was a small but significant correlation ($z = 5.782$).
- There was significant heterogeneity.
- Because there was significant difference in the *r*-values, sub-analyses were done to determine what caused the differences in the *r*-values across the studies.
- In the sub-analysis, articles were divided into either clinical or non-clinical, by age, and if the mother's scores were as perceived by her daughter.
- Daughters or mothers clinically diagnosed with an eating disorder were placed into the clinical sub-analysis.
- Daughters were divided into one of two groups, those with girls age 12 and younger and those with girls age 13 and older.

Sub Analysis:

Clinical-

- In the clinical sub-analysis six effect sizes were calculated.
- The overall effect size was $r = -0.0117$ and was not a significant correlation ($z = -0.33$, n.s.).

Non-Clinical-

- In the non-clinical sub-analysis eighteen effect sizes were calculated.
- The overall effect size was a significant correlation and was of medium strength ($r = 0.1990$, $p<.001$, $z = 7.723$).

Daughters 12 and Younger-

- In the sub-analysis that included those studies with daughter's age 12 and younger, eight effect sizes were calculated.
- The overall effect size was a significant correlation and was of medium strength ($r = 0.1967$, $p<.001$, $z = 5.322$).

Daughters 13 and Older-

- In the sub-analysis that included those studies with daughter's age 13 and older, ten effect sizes were calculated.
- The overall effect size was $r = -0.0080$ and was not a significant correlation ($z = -0.21$, n.s.).

Daughter Perceived Scores-

- In the sub analysis that included those studies whose maternal scores were judged by their daughters, two effect sizes were calculated.
- The overall effect size was significant correlations and was of medium strength ($r = 0.2809$, $p<.001$, $z = 3.24$).

Discussion

- The purpose of this meta-analysis was to come to a conclusion on the present research on maternal modeling of eating behavior and its effect on their daughters', as well as to pinpoint where the research should go in the future.
- The overall effect size for the 24 studies was $r = 0.116972$, $p<.001$.
- This meta-analysis found a correlation between the eating behaviors of mothers and daughters. This indicates that mothers who struggle with disordered eating, diet frequently and/or have body dissatisfaction may put their daughters at a great risk for similar problems.
- These results however should not lead to maternal blame. Disordered eating and low body esteem in both mothers and daughters are the result of many factors.
- This information may be helpful to parents raising daughters, who need to learn to respect their own bodies for the sake of their daughters.
- In the sub-analysis the clinical and daughters 13 and older sub-analyses were not significant.
- The sub-analysis daughter 12 and younger was a significant correlation indicating that girls at these ages are affected by their mother's modeling of eating behavior. These girls may be under greater parental influence when compared to older girls who are influenced more by their peers and media.
- The non-clinical sub-analysis was also a significant correlation. This possibly indicates that those girls with disturbed eating, and not actual diagnosed eating disorders, are affected by maternal modeling. Diagnosable eating disorders may have more intense problems, such as control issues and family cohesion, so the effect of maternal modeling is insignificant.
- In the final sub-analysis, when the daughter rated the maternal scale of disordered eating, it appears that maternal modeling does in fact influence the eating behavior of the daughters. This technique may be a more accurate way of testing to what degree a mother is influencing her daughter.
- Further studies looking at how girls perceive their mothers' eating behaviors would be an interesting and enlightening direction to head.
- Regardless of the results in any studies or research done about eating disorders it is important to keep in mind that many factors influence the development of an eating disorder. It is a complex disorder that needs more research on both the developmental side and in the treatment and recovery.

http://www.hotelkingdom.com

References

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